

# Node Indegree

## Description

The *indegree* of a node of a directed network is the number of edges incoming to the node. The algorithm determines the indegree of all nodes (indegree sequence), which will be listed in the output file.

## Pros & Cons

The network to analyze must be directed, otherwise there are no special constraints.

## Applications

Basic analysis tool, not particular for special disciplines or problems.

## Implementation Details

The algorithm requires only one input, the file where the edges of the network are listed. A first read-in of the inputfile will set the values of the number of nodes and edges of the network. In the second read-in the indegrees of all nodes will be calculated. The program runs in a time  $O(m)$ ,  $m$  being the number of edges of the network.

## Links

- [Source Code](#)

## Acknowledgements

The algorithm was implemented and documented by S. Fortunato, integrated by S. Fortunato and W. Huang.

## References

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## See Also



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